California Energy Commission

STAFF REPORT

LOCALIZED HEALTH IMPACTS REPORT

For Selected Projects Awarded Funding Through the Alternative and Renewable Fuel and Vehicle Technology Program Under Solicitation GFO-18-601-Community-Scale and Commercial-Scale Advanced Biofuels Production Facilities

California Energy Commission

Gavin Newsom, Governor

March 2019 | CEC-600-2019-010

California Energy Commission

Jonathan Bobadilla
Primary Author

Hieu Nguyen
Project Manager

Elizabeth John
Office Manager
ADVANCED FUEL PRODUCTION OFFICE

Kevin Barker
Deputy Director
FUELS AND TRANSPORTATION DIVISION

Drew Bohan
Executive Director

ABSTRACT

Assembly Bill 118 (Núñez, Chapter 750, Statutes of 2007) created the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). This statute, amended by Assembly Bill 109 (Núñez, Chapter 313, Statutes of 2008), authorizes the California Energy Commission to "develop and deploy innovative technologies that transform California's fuel and vehicle types to help attain the state's climate change policies." Assembly Bill 8 (Perea, Chapter 401, Statutes of 2013) reauthorizes the ARFVTP through January 1, 2024.

AB 118 also directs the California Air Resources Board (CARB) to develop guidelines to ensure air quality improvements. The CARB's Air Quality Improvement Program (AQIP) Guidelines, approved in 2008, are published in the *California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1, AB 118 Air Quality Guidelines for the Alternative and Renewable Fuel and Vehicle Technology Program*. The guidelines require the California Energy Commission, as the funding agency, to analyze the localized health impacts of ARFVTP-funded projects that require a permit (13 CCR § 2343).

This Localized Health Impacts Report analyzes and reports on the potential health impacts to communities from projects seeking Energy Commission funding. Information submitted by project funding applicant(s) is used in this report to help identify communities at a higher risk of adverse health effects from pollution. As provided by 13 CCR § 2343, this Localized Health Impacts Report is required to be available for public comment for 30 days prior to the approval of projects.

Keywords: air pollution**,** air quality improvement program (AQIP), alternative fuels, biofuel infrastructure, biomethane Production, California Air Resources Board (CARB), Assembly Bill (AB) 118, California Environmental Quality Act (CEQA), environmental justice indicators (EJ), Environmental Justice Screening Method (EJSM), localized health impacts (LHI)

Please use the following citation for this report:

Bobadilla, Jonathan. 2019. *Localized Health Impacts Report Under Solicitation GFO-18-601-Community-Scale and Commercial-Scale Advanced Biofuels Production Facilities.* California Energy Commission, Fuels and Transportation Division. Publication Number: CEC-600-2019-010.

TABLE OF CONTENTS

LIST OF TABLES

Executive Summary

Under the *California Code of Regulations Title 13, (CCR § 2343),* this Localized Health Impacts Report (LHI report) describes the alternative fuel infrastructure project proposed for Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP) funding that may require a conditional or discretionary permit or environmental review such as conditional use permits, air quality permits, wastewater permits, hazardous waste disposal permits, and other land-use entitlements. This LHI report does not include projects that require only residential building permits, mechanical/electrical permits, or fire/workplace safety permits, as these are outside the scope of this LHI report.

The California Energy Commission is required to assess the local health impacts of projects proposed for ARFVTP funding. This LHI report focuses on the potential health impacts to communities from project-related emissions or pollution. Project locations where communities potentially have a higher risk of adverse health impacts from pollution are identified as *high-risk community project locations*. High-risk communities are identified using demographic data with environmental data for air quality from the California Air Resources Board.

Environmental justice communities, low-income communities, and minority communities are considered the most impacted by any project that could result in increased criteria and toxic air pollutants within an area. Preventing or minimizing health-risks from pollution is vital in any community, but it is especially important for communities already considered to be at high risk due to preexisting poor air quality and other prevalent factors.

The California Energy Commission proposes to fund five advanced biofuel production facilities under Grant Solicitation GFO-18-601. The five proposed awardees selected to receive funding have submitted localized health impact information regarding their proposed project site locations. Based on the proposed awardee information provided and staff analysis, the projects located in Madera, Modesto, and Riverdale are high-risk community project locations. Staff does not anticipate a net increase in criteria and toxic emissions from implementing any of the proposed projects. Upon completion, these projects will benefit communities by utilizing locally processed waste feedstocks and converting them into a lower carbon intensity alternative fuel source. This process has the additional benefit of diverting greenhouse gas emitting waste from landfills or from being burned off into the atmosphere. The health impacts to the communities where the projects are located are positive in terms of air quality and harmful emission reductions.

CHAPTER 1:
Projects Proposed for Funding

On August 7, 2018, the California Energy Commission (Energy Commission) released a grant solicitation titled "Community-Scale and Commercial-Scale Advanced Biofuels Production Facilities" (GFO-18-601) under the Alternative and Renewable Fuel and Vehicle Technology Program (ARFVTP). GFO-18-601 offered ARFVTP grant funding to applicants towards the construction of low carbon biofuel production projects at new and existing biofuel production facilities. This Localized Health Impacts Report (LHI report) assesses and reports on the potential localized health impacts from the proposed projects. A 30-day public review and comment period applies to this LHI report from the date of publishing

On January 18, 2019, the Energy Commission published a notice of proposed award (NOPA)[1] identifying five applicants recommended by Energy Commission staff for project funding. This LHI report assesses the locations of the projects sites chosen by the five proposed awardees. Table 1 lists the proposed awardees identified in the NOPA, the title of their proposed projects, project locations, and environmental justice (EJ) indicators.[2] EJ indicator definitions are in Appendix A of this LHI report.

Table 1: Project Details Along With EJ Indicators

Proposed Awardee	Project Title	Proposed Project Location	EJ Indicator(s)
City of Roseville	Roseville Energy Recovery Project	5051 Westpark Drive Roseville, CA 95747	None
East Bay Municipal Utility District	Renewable Natural Gas Production for Transportation Fuel at a Wastewater Treatment Facility	2020 Wake Avenue, Oakland, CA 94607	Poverty
West Coast Waste Company Inc.	Madera Renewable Energy One (MADRE 1)	9537 Road 29 ½ Madera, CA 93637	Poverty, Unemployment, and Minority
Aemetis Advanced Products Keyes, Inc.	Aemetis Low Carbon Advanced Ethanol Project	5300 Claus Road Modesto, CA 95357	Poverty, Unemployment, and Minority
Five Points Pipeline LLC	Five Points Pipeline Cluster Project	12103 West Elkhorn Avenue Riverdale, CA 93656	Poverty and Unemployment

Source: California Energy Commission staff

1 https://www.energy.ca.gov/contracts/GFO-18-601_NOPA.pdf

2 EJ indicators developed by the United States Environmental Protection Agency (U.S. EPA), Office of Policy. Available at https://www.epa.gov/ejscreen/environmental-justice-indexes-ejscreen.

Public Comment

As provided by Title 13, Section 2343 of the California Code of Regulations, a 30-day public review period applies to this LHI report from the date it is posted on the Energy Commission website. The original posting date for this report is listed at: https://www.energy.ca.gov/altfuels/documents/index.html.

The Energy Commission encourages comments by email. Please include your name or organization's name in the name of the file. Send comments in either Microsoft® Word format (.doc) or in Adobe® Acrobat® format (.pdf) to FTD@energy.ca.gov.

The public can email comments to FTD@energy.ca.gov or send them to:

California Energy Commission
Fuels and Transportation Division
1516 Ninth Street, MS-44
Sacramento, CA 95814-5512

All written comments will become part of the public record and may be posted to the Internet.

News media should direct inquiries to the Media and Public Communications Office at (916) 654-4989, or by e-mail at mediaoffice@energy.ca.gov.

CHAPTER 2:
Project Description

As part of the GFO-18-601 grant solicitation process, staff requested that applicants provide LHI information on their proposed projects. Project descriptions, the proposed site address, expected project-generated emissions, potential community health impacts, and community-outreach efforts information were submitted by each applicant. This chapter describes the proposed projects using LHI information submitted by each applicant.

City of Roseville - Roseville Energy Recovery Project

City of Roseville proposes to expand their existing Pleasant Grove Wastewater Treatment Plant (PGWWTP) at 5051 Westpark Drive in Roseville to include biofuel production capabilities. The expansion will add anaerobic digesters for converting wastewater treatment plant (WWTP) organic waste into biomethane suitable for compressed natural gas (CNG) vehicles. Upon completion, PGWWTP is expected to have a production capacity of 267,000 diesel gallon equivalents (DGE) per year of biofuel. The biofuel produced at PGWWTP will be dispensed onsite to City of Roseville's solid waste fleet, which is converting from diesel to CNG vehicles in anticipation of this project.

The proposed awardee has provided expected air pollutant emissions from implementing this project in Table 2. Quantified criteria air pollutants include reactive organic gases (ROGs), nitrogen oxides (NO_x), particulate matter diameter 2.5 um or less ($PM_{2.5}$), and particulate matter diameter 10 um or less (PM_{10}) in pounds annually (lbs. /year). Mobile sources include CNG fleet refueling onsite and transporting organic waste from the PGWWTP. Micro turbines are onsite equipment installed as part of the upgrade project.

Table 2: City of Roseville Estimated Project Related Emissions

Emission Source	ROG (lbs./year)	NOx (lbs./year)	$PM_{2.5}$ (lbs./year)	PM_{10} (lbs./year)
Mobile Sources	621	438	219	73
Micro turbines	876	3468	475	110
Total	1497	3906	694	183

Source: City of Roseville staff

PGWWTP currently sends organic waste to landfills where it generates the greenhouse gas (GHG) methane and other landfill gases during decomposition. Upon completion, the upgraded PGWWTP will divert 5 millions of organic waste from landfills, reduce GHG emissions by an estimated 3,700 metric tons, and reduce NO_X emissions by 5 metric tons annually.

East Bay Municipal Utility District – Renewable Natural Gas Production for Transportation Fuel at a Wastewater Treatment Facility

East Bay Municipal Utility District (EBMUD) proposes to expand their Oakland WWTP at 2020 Wake Avenue in Oakland to include an onsite renewable natural gas (RNG) production facility. The Oakland WWTP currently produces biomethane from wastewater organics via anaerobic digesting equipment. Upon completion of this project, the Oakland WWTP will have a production capacity of up to 1.16 million DGE of RNG. The RNG fuel produced will be refined to pipeline CNG standards, injected into the PG&E pipeline, and consumed by CNG vehicles off site.

The proposed project is not expected to increase local criteria and toxic air emissions, since the RNG production process releases minimal criteria pollutants and toxic air contaminants. EBMUD's estimated annual emissions reduction of carbon dioxide (CO_2), NO_x, volatile organic compounds (VOC), PM, and sulfur dioxide (SO_2) is in Table 3. The assumption for reduced emissions is that if the organic waste gases are not diverted towards RNG production, they will be flared or combusted onsite and release said pollutants.

Table 3: EBMUD Estimated Emissions Reductions

Emission Source	CO_2 (tons/year)	NO_X (tons/year)	VOC (tons/year)	PM (tons/year)	SO_2 (tons/year)
On-site Flaring or Combustion	20	7	5	1	8

Source: East Bay Municipal Utility District staff

EBMUD's WWTP is located in the community of West Oakland, where EBMUD's West Oakland Liaison Group staff invites community members to discuss proposed projects and activities. If awarded funding, EBMUD staff will create an educational factsheet and accompanying webpage to educate the public about the efficiency and environmental benefits from the proposed project.

West Coast Waste Company, Inc. - Madera Renewable Energy One (MADRE 1)

West Coast Waste Company, Inc. is proposing to construct a biofuel production refinery (MADRE 1) at 9537 Road 29 ½ in Madera with a production capacity of 45 million gallons of renewable ethanol per year. No significant increases in vehicle traffic emissions is expected at the project site, as MADRE 1 is located in a low traffic rural area a mile from Highway 99.

Approximately 330,000 tons per year of organic material from local farms will be used as feedstock to produce cellulosic ethanol. This feedstock is currently subject to open field burning where it generates harmful criteria pollutants. Upon completion, MADRE 1 will improve local air quality by providing a low carbon alternative fuel and reducing

open field burning. West Coast Waste Company, Inc. expects that the project will reduce CO_2 by 500,000 metric tons annually by preventing open field burning, and displacing fossil fuels with ethanol.

The proposed awardee has conducted outreach by making publicly available project fact sheets, renderings of the biofuel production refinery, job statistics, environmental issues and benefits, project schedule, and other pertinent information regarding their proposed project. During the lead up to construction, the proposed awardee intends to hold a job fair marketed to local community residents.

Aemetis Advanced Products Keyes, Inc. - Aemetis Low Carbon Advanced Ethanol Project

Aemetis Advanced Products Keyes, Inc. (Aemetis, Inc.) proposes to construct a new ethanol production plant at 5300 Clause Road in Modesto. The proposed site is near rural land, with commercial buildings to the West. When operational, the plant will displace 7.5 million DGE of petroleum-based fuels and eliminate an estimated 145,000 metric tons per year of CO_2 equivalents annually. Ethanol produced from the completed production plant will blended into local fuel sources to produce a lower-carbon intensity fuel alternative.

The closest residential neighborhood is less than 0.5 miles to the northwest of the site. The project may potentially cause particulate emissions from currently existing feedstock storage. Aemetis, Inc. will work with the San Joaquin Valley Air Pollution Control District to mitigate the effects of project-related toxic emissions. Aemetis will educate the public by having public tours of the production plant, holding seminars, and speaking at local events. Aemetis estimates that majority of the ethanol output from the this production plant will be consumed in Banta, Fresno and San Jose, where ethanol blended fuels can have a positive impact on local communities suffering from air pollution.

Five Points Pipeline LLC - Five Points Pipeline Cluster Project

Five Points Pipeline, LLC proposes to construct a new biomethane production plant at 12103 West Elkhorn Avenue in Riverdale. The project site is in an agricultural area adjacent to a biogas electrical generation facility and anaerobic digester facility. The production plant will process manure from local dairy farms to produce an estimated 2.4 million DGE of biofuel and eliminate an estimated 94,000 metric tons of CO_2 equivalents annually. The biomethane produced will be injected into utility owned natural gas pipelines and delivered to CNG vehicle refueling stations in the Central Valley.

The proposed awardee conducted community outreach in the form of community meetings with local residents to address concerns about traffic, construction noise,

dust, and other potential negative impacts. Nonprofit organizations specializing in job placement for disadvantaged populations are also involved in this project. There are no expected net increases in criteria pollutant from implementing this project.

CHAPTER 3:
Location Analysis

Under the *California Code of Regulations Title 13, (CCR § 2343),* this LHI report describes the hydrogen infrastructure project proposed for ARFVTP funding that may require a conditional use permit, discretionary permit, or California Environmental Quality Act (CEQA) review. The Energy Commission interprets "permits" to suggest discretionary and conditional use permits because they require a review of potential impacts to communities and the environment before issuance. Since ministerial-level permits, such as building permits, do not assess public health-related pollutants, Energy Commission staff does not assess projects requiring only ministerial-level permits in this report.

This LHI report analyzes the project location by applying staff's interpretation of the Environmental Justice Screening Method (EJSM).[3] A proposed project location must meet a two-part environmental and demographic standard for staff to identify the location as a high-risk community project location. The environmental standard uses California Air Resources Board (CARB) air quality monitoring data on nonattainment[4] status for areas with a high concentration of air pollutants. The demographic standard uses data from the Employment Development Department's *Monthly Labor Force Data*[5] and U.S. Census Bureau's *American Community Survey*[6] data on age, poverty, race, and unemployment. The city name, along with demographic information for the proposed project location under GFO-18-601, is in Table 4 of this LHI report.

Environmental Standard

Based on CARB air quality monitoring data,[7] the projects proposed in Madra, Modesto, Oakland, Riverdale, and Roseville are within nonattainment zones for either ozone,

3 California Air Resources Board, *Air Pollution and Environmental Justice, Integrating Indicators of Cumulative Impact and Socio-Economic Vulnerability Into Regulatory Decision-Making*, 2010. (Sacramento, California) Contract authors: Manuel Pastor Jr., Ph.D., Rachel Morello-Frosch, Ph.D., and James Sadd, Ph.D.

4 *Nonattainment status* (or zones) are areas designated by the California Air Resources Board with at least one violation of an air quality standard for pollutants within the last three years, as of June 2017. Available at https://www.arb.ca.gov/desig/desig.htm.

5 https://www.labormarketinfo.edd.ca.gov/file/lfmonth/countyur-400c.pdf.

6 https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml.

7 https://www.arb.ca.gov/desig/adm/adm.htm.

$PM_{2.5}$, or PM_{10}. This nonattainment zone information indicates that there may be poor air quality where all five of the proposed projects are located.

Demographic Standard

If a project located within a nonattainment zone has more than one EJ indicator (shown in Table 1), staff will identify it as a high-risk community project location. A high-risk community project location will have its city name in Table 4 in red font, and the percentage values of the EJ indicator thresholds exceeded highlighted in yellow. For example, staff has identified the project location in Madera as a high-risk community project location, due to being within a nonattainment zone and exceeding more than one EJ indicator threshold. For more details on the EJSM and EJ indicator criteria, please see Appendix A of this LHI report.

Table 4: EJ Indicators by Project Location City Demographic

	Below Poverty (2017)	Black or African American (2017)	American Indian and Alaska Native (2017)	Asian and Native Hawaiian and Pacific Islander (2017)	Hispanic or Latino Race (2017)	Persons Under 5 Years of Age (2017)	Persons Over 65 Years of Age (2017)	Unemployment (November 2018)
California	11.1%	5.8%	0.7%	14.5%	38.8%	6.4%	13.2%	3.9%
EJ Indicator Threshold	>11.1%	>30%	>30%	>30%	>30%	≥26.4%	≥33.2%	>3.9%
Madera	24.6%	3.2%	1.1%	2.1%	78.6%	10.0%	7.1%	4.1%
Modesto	13.3%	4.2%	0.8%	8.7%	37.9%	7.0%	13.5%	6.3%
Oakland	14.5%	24.3%	0.9%	16.5%	27.0%	6.2%	12.5%	2.8%
Riverdale	27.7%	0.2%	0.1%	0.0%	7.2%	9.6%	12.1%	7.5%
Roseville	6.5%	1.8%	0.6%	10.4%	15.1%	6.3%	15.7%	3.1%

Sources: California Energy Commission staff, Employment Development Department, and U.S. Census Bureau. *The city/county names in red indicate a high-risk community, while the yellow highlighted percentages indicate which categories exceed the EJ indicator threshold. **An asterisk (*) may signify a default to county-level data

Analysis Summary

Staff has identified the project locations in Madera, Modesto, and Riverdale as high-risk community project locations based on EJSM standards for suggested environmental and demographic standards. Staff does not anticipate a net increase in criteria and toxic emissions from implementing any of the proposed projects. Upon completion, these projects will benefit communities by utilizing locally processed waste feedstocks and converting them into a lower carbon intensity alternative fuel source. This process has the added benefit of diverting greenhouse gas emitting waste from landfills or from

being burnt off to release harmful emissions. The health impacts to the communities where the projects are located are positive in terms of air quality and reducing harmful emissions.

GLOSSARY

AIR QUALITY IMPROVEMENT PROGRAM - Established by the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007 (AB 118, Statutes of 2007, Chapter 750), is a voluntary incentive program administered by CARB to fund clean vehicle and equipment projects, research of biofuels production.

BIOMETHANE – A pipeline-quality gas that is fully interchangeable with conventional natural gas and can be used as a transportation fuel to power natural gas engines. Biomethane is most commonly produced through an anaerobic digestion or gasification process using various biomass sources.

CALIFORNIA CODE OF REGULATIONS - The official compilation and publication of the regulations adopted, amended or repealed by state agencies pursuant to the Administrative Procedure Act (APA). Properly adopted regulations that have been filed with the Secretary of State have the force of law.

CARBON DIOXIDE EQUIVALENT – A measure used to compare emissions from various greenhouse gases based upon their global warming potential. The carbon dioxide equivalent for a gas is derived by multiplying the mass of the gas by the associated global warming potential.

CALIFORNIA ENVIRONMENTAL QUALITY ACT - A statute that requires state and local agencies to identify the significant environmental impacts of their actions and to avoid or mitigate those impacts, if feasible.

COMPRESSED NATURAL GAS – A pressurized hydrocarbon gas composed of methane, ethane, butane, propane, and other gases.

CRITERIA AIR POLLUTANT – An air pollutant for which acceptable levels of exposure can be determined and for which the U.S. Environmental Protection Agency has set an ambient air quality standard. Examples include ozone (O_3), carbon monoxide (CO), nitrogen oxides (NO_X), sulfur oxides (SO_X), and particulate matter (PM_{10} and $PM_{2.5}$).

ENVIRONMENTAL JUSTICE - The fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

ENVIRONMENTAL JUSTICE SCREENING METHOD – A screening approach for combining environmental and demographic indicators to inform agency outreach and engagement practices regarding environment justice.

ETHANOL – A liquid that is produced chemically from ethylene or biologically from the fermentation of various sugars from carbohydrates found in agricultural crops and cellulosic residues. Used in the United States as a gasoline octane enhancer and oxygenate, or in higher concentration (E85) in flex-fuel vehicles.

FEEDSTOCK – Any material used directly as a fuel or converted into fuel. Biofuel feedstocks are the original sources of biomass. Examples of biofuel feedstocks include corn, crop residue, and waste food oils.

GRANT FUNDING OPPORTUNITY – Where the Energy Commission offers applicants an opportunity to receive grant funding for projects meeting the solicitation requirements.

GREENHOUSE GAS – Any gas that absorbs infrared radiation in the atmosphere. Common examples of greenhouse gases include water vapor, carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), halogenated fluorocarbons (HCFCs), ozone (O_3), perfluorinated carbons (PFCs), and hydrofluorocarbons (HFCs).

LANDFILL GAS – Gas generated by the natural degradation and decomposition of municipal solid waste by anaerobic microorganisms in sanitary landfills. The gases produced, carbon dioxide and methane, can be collected by a series of low-level pressure wells and can be processed into a medium Btu gas that can be further processed into a transportation fuel or combusted to generate heat or electricity.

LOCALIZED HEALTH IMPACTS – Potential project related health impacts from Energy Commission funded projects.

METHANE – A light hydrocarbon that is the main component of natural gas. It is the product of the anaerobic decomposition of organic matter or enteric fermentation in animals and is a greenhouse gas. The chemical formula is CH_4.

NO_X – Oxides of nitrogen, a chief component of air pollution that is commonly produced by the burning of fossil fuels.

PARTICULATE MATTER - Any material, except pure water, that exists in a solid or liquid state in the atmosphere. The size of particulate matter can vary from coarse, wind-blown dust particles to fine particle combustion products.

LIST OF ACRONYMS

AB	Assembly Bill
AQIP	Air Quality Improvement Program
ARFVTP	Alternative and Renewable Fuel and Vehicle Technology Program
CARB	California Air Resources Board
CCR	California Code of Regulations
CEQA	California Environmental Quality Act
CNG	compressed natural gas
CO_2	carbon dioxide
DGE	diesel gallon equivalent
EBMUD	East Bay Municipal Utility District
EJ	environmental justice
EJSM	Environmental Justice Screening Method
GFO	grant funding opportunity
GHG	greenhouse gas
MADRE 1	Madera Renewable Energy One
NO_X	Nitrogen oxide
$PM_{2.5}$	particulate matter; 2.5 micron or smaller in diameter
PM_{10}	particulate matter; 10 micron in diameter
PGWWTP	Pleasant Grove Wastewater Treatment Plant
RNG	renewable natural gas
ROG	reactive organic gases
SB	Senate Bill
SO_2	sulfur dioxide
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound
WWTP	wastewater treatment plant

APPENDIX A:
Localized Health Impacts Report Method

This LHI report assesses the potential health impacts on communities from projects proposed to receive ARFVTP funding. This LHI report is prepared under the *California Code of Regulations, Title 13, Motor Vehicles, Chapter 8.1 (CCR § 2343)*:

"(6) Localized health impacts must be considered when selecting projects for funding. The funding agency must consider EJ consistent with state law and complete the following:

(A) For each fiscal year, the funding agency must publish a staff report for review and comment by the public at least 30 calendar days prior to the approval of projects. The report must analyze the aggregate locations of the funded projects, analyze the impacts in communities with the most significant exposure to air contaminants or localized air contaminants, or both, including, but not limited to, communities of minority populations or low-income populations, and identify agency outreach to community groups and other affected stakeholders.

(B) Projects must be selected and approved for funding in a publicly noticed meeting."

This LHI report is not intended to be a detailed pollution analysis of proposed projects nor is it intended to substitute for the environmental review conducted during CEQA. This LHI report includes staff's application of the EJSM developed by the U.S. EPA to help identify projects in areas where social vulnerability indicators, high exposure to pollution, and greater health-risks are present.

Energy Commission staff identifies high-risk community project locations using data from CARB, the U.S. Census Bureau, and other public agencies. Staff analyzes these data to assign EJ indicators for each project location specified in the LHI report. The proposed project location must meet a two-part standard as follows:

Part 1 – Environmental Standard:

- Communities located within an air quality nonattainment zone for ozone, PM 2.5, or PM 10, as designated by the California Air Resources Board for criteria pollutants.

Part 2 – Demographic Standard:

- Communities having more than one of the following EJ indicators for (1) minority, (2) poverty, (3) unemployment, and (4) age. The EJ indicator thresholds is defined by staff as:

    1) A minority subset represents more than 30 percent of a given city's population.

2) A city's poverty level exceeds the state average poverty level.

3) The city (or county if city data is unavailable) unemployment rate exceeds the state average unemployment rate.

4) The percentage of people living in a city who are younger than 5 years of age or older than 65 years of age is 20 percent higher than the state average for persons under 5 years of age or over 65 years of age.